

# Title of Investigation:

Realistic Adapted Materials for Participation in Science by People with Disabilities (RAMPS)

## **Principal Investigator:**

Brenda Dingwall (Code 120)

## Other In-house Members of the Team (include Code):

John Brinton (Code 810) and Denna Lambert (Code 120)

#### Other External Collaborators:

National Federation of the Blind (NFB)

#### **Initiation Year:**

FY 2005

## Aggregate Amount of Funding Authorized in FY 2004 and Earlier Years:

\$0

## Funding Authorized for FY 2005:

\$5,000, 0.5 FTE

#### Actual or Expected Expenditure of FY 2005 Funding:

**\$0** 

## Status of Investigation at End of FY 2005:

To be continued in FY 2006 with funds remaining from FY 2005 and earlier years

## **Expected Completion Date:**

**FY 2006** 

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#### Purpose of Investigation:

The goal of Realistic Adapted Materials for Participation in Outreach by People with Disabilities (RAMP) is to create a guidebook that helps NASA personnel prepare and adapt outreach materials for people with disabilities.

#### Accomplishments to Date:

- Met with National Federation of the Blind (NFB) personnel in August to discuss guidebook.
- Identified the Goddard Space Flight Center point of contact for developing these materials.
- Gathered existing information on preparing outreach materials for people with disabilities from Codes 810, 840, and 120.
- A meeting with NFB personnel is planned for early 2006.

#### Planned Future Work:

People with disabilities represent a relatively untapped source for recruiting future NASA employees. If we fail to reach out to this group, we risk losing bright, capable people who can help us meet our future goals. While it is not feasible, practical or cost efficient to provide all the services required by these workers, we can create opportunity by working cooperatively with educational institutions, disability organizations, and healthcare professionals. RAMP will give NASA personnel the tools they need to begin tapping this source of expertise.

Once the NFB portion of the book is complete, we plan to create similar manuals for other disability communities.

#### **Key Points Summary:**

In August 2004 and 2005, NASA's Wallops Flight Facility (WFF), in partnership with NFB, sponsored a program called "Rocket On," which provided 12 blind high-school students a unique opportunity to attend a rocket camp. The camp included workshops on basic rocket physics, trajectory planning, and electronics, and culminated with the students' assembly and successful launch of a sounding rocket at WFF.

The success of "Rocket On" was due in no small part to WFF's willingness to adapt outreach materials and test equipment to make them appropriate for use by the blind. This was achieved largely by trial and error. Post-camp interviews with WFF personnel revealed a need for a handbook explaining how to adapt existing and develop new outreach/educational programs for people with disabilities. It was suggested that the handbook also include a listing of professionals who would be willing to provide advice.

Preliminary discussions regarding the handbook's format and content were held with NFB personnel during the August 2005 Rocket On Camp. Unfortunately, schedule conflicts prevented a follow-up meeting in the fall. Code 120 will be able to provide some additional resources early in 2006, and the book should be completed in time for the 2006 Rocket On Camp.

NASA's Education Enterprise Strategy states: "The NASA Mission—to understand, explore, and inspire—depends upon people with the ingenuity to invent new tools, the passion to solve problems, and the courage to ask difficult questions. This vision includes students with disabilities. People with disabilities represent a relatively untapped source of creative, intelligent people who NASA needs to succeed in the future.